



Oregon

Theodore Kulongoski, Governor

Department of Environmental Quality

Northwest Region Portland Office

2020 SW 4th Avenue, Suite 400

Portland, OR 97201-4987

(503) 229-5263

FAX (503) 229-6945

TTY (503) 229-5471

April 2, 2009

Also Sent Via E-mail

Mr. Robert J. Wyatt
Northwest Natural Gas Company
220 N.W. Second Avenue
Portland, OR 97209

**Subject: Discharge Limitations and Monitoring Requirements
NW Natural Former "Gasco" Site
Portland, Oregon
ECSI No. 84**

Dear Mr. Wyatt:

The Department of Environmental Quality (DEQ or Department) is providing discharge limitations and monitoring requirements for the treatment system being evaluated by NW Natural (see attached "DEQ Memorandum"). The treatment system is an integral component of the hydraulic control/containment system being planned along the shoreline of the property owned by NW Natural (NW Natural Property, or the "Gasco Site"), and the northern portion of the Siltronic Corporation property (Siltronic Property). The hydraulic control/containment system in combination with a vertical barrier in the southern portion of the NW Natural Property, represent the principal source control measures (SCMs) NW Natural is developing to mitigate migration of contamination to the Willamette River by MGP dense non-aqueous phase liquids, and groundwater in the alluvial water-bearing zone contaminated by: 1) MGP constituents, and 2) volatile organic compounds (VOCs) from the Siltronic Property (e.g., trichloroethene, cis-1,2-dichloroethene, vinyl chloride), where these chemicals have commingled with MGP DNAPL and/or MGP impacted groundwater.

The DEQ Water Quality Program developed the discharge limitations and monitoring requirements using methods described in the Department's Internal Management Directive for Toxicity Reasonable Potential Analysis. DEQ's analysis relied on bench test data reported in the treatability study completed by NW Natural¹. The attached DEQ memorandum: 1) identifies analytes with a "reasonable potential" to impact the river and their corresponding discharge limits; 2) lists the parameters to be further evaluated through monitoring during treatment system pilot testing and the initial several months of system operation; and 3) provides monitoring requirements for all parameters.

During preparation of the attachment, DEQ considered NW Natural's October 31, 2006 memorandum² (October 31st Memorandum). The October 31st Memorandum provides comments regarding the presence and concentrations of certain analytes included in a fall 2006 version of the parameter list. The discharge limitations and monitoring requirements laid-out in the DEQ Memorandum address many of NW Natural's comments (e.g., discharge limitations and laboratory quantitation limits). In addition, the monitoring program will provide data to further evaluate NW Natural's comments regarding the occurrence and concentrations of selected parameters in groundwater, such as chlorophenolic compounds

¹ Anchor Environmental, LLC, 2008, "Groundwater Source Control Treatability Testing, NW Natural Gasco Site," December, a report prepared for NW Natural.

² Anchor Environmental, LLC, 2006, "Groundwater Discharge Limits in Attachment CC to Second Addendum, Groundwater Source Control Pilot Plan," October 31, a technical memorandum prepared for NW Natural.

Mr. Robert Wyatt
NW Natural
April 2, 2009
Page 2 of 2

(other than pentachlorophenol) and metals (other than copper, chromium VI, iron, manganese, and mercury). NW Natural should be aware additional parameters have been included on the list based on information that became available after October 2006. For example, acetone and 2-butanone were identified as byproducts of using enhanced in-situ bioremediation to treat VOCs on the Siltronic Property. The parameter list also reflects an ongoing process by NW Natural to evaluate and select laboratory analytical method(s) for monitoring cyanide in groundwater and during treatment.

NW Natural indicated during a meeting on March 16th, that discharge limitations and monitoring requirements were needed prior to initiating treatment system pilot testing. The DEQ Memorandum provides this information. Within 30 days receipt of this letter, NW Natural should submit a pilot testing plan for DEQ review. The plan should describe: the goals and objectives of the pilot test(s); treatment system components and processes to be evaluated; extraction well locations, pumping rates, and duration, including the rationale for each; sampling objectives, and sample collection locations and handling procedures; laboratory analytical methods and practical quantitation limits for each parameter; and the pilot testing schedule.

DEQ appreciates NW Natural's work to evaluate and address MGP waste and associated contamination on the NW Natural and Siltronic properties. Please don't hesitate to contact me if you have questions regarding this letter and attachment.

Sincerely,

Dana Bayuk
Project Manager
Portland Harbor Section

Attachment: DEQ Memorandum

Cc: Sandy Hart, NW Natural
Patty Dost, Schwabe Williamson & Wyatt
Rob Ede, Hahn & Associates
John Edwards, Anchor QEA
Carl Stivers, Anchor QEA
Tom McCue, Siltronic Corporation
Alan Gladstone, Davis Rothwell Earle & Xochihua
James Peale, Maul Foster & Alongi, Inc.
Eric Blischke, EPA
Chip Humphries, EPA
Kristine Koch, EPA
Sean Sheldrake, EPA
Jim Anderson, DEQ/PHS
Rob Burkhart, DEQ/WQ
Tom Gainer, DEQ/PHS
Henning Larsen, DEQ/SRS
Matt McClincy, DEQ/PHS
ECSI No. 84 File
ECSI No. 183 File